



Customer Release Note

Linux QMI SDK 04.00.11



SIERRA
WIRELESS®

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Document History

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Introduction

1.1. Document Scope

This document describes the content of the Linux QMI SDK 04.00.11 release.

1.2. Document Audience

This release note may be distributed to all direct and indirect customers.

1.3. New Features/Enhancements

Table 1. New Features/Enhancements

Feature	Description
Multi-PDN QMAP IPV6 & Qos Support	<ul style="list-style-type: none">• New API<ul style="list-style-type: none">○ QMAP<ul style="list-style-type: none">▪ SetQmapIPv6Table▪ SetQosMuxID
eDRX support	<ul style="list-style-type: none">• New API<ul style="list-style-type: none">○ NAS<ul style="list-style-type: none">▪ SLQSNASSeteDRXParams▪ SLQSNASGeteDRXParams
Firmware Upgrade on MBIM mode	Lite firmware downloader now upgrade modem in MBIM mode (experimental support)

Please refer to QMAP_FullSDK.html and QMAP_LiteSDK.html for QMAP test procedures.

1.4. Removed Features

Nil

1.5. Lite APIs Change

- dms_UIMGetICCI
- dms_GetIMSI

Both API are depreciated on WP76xx and are replaced by uim_ReadTransparent.

2. Abbreviations and Definitions

Table 2. Abbreviations and Definitions

Abbreviation/Acronym	Definitions
MSM	Mobile Station Modem
PRI	Product Release Instructions
QMI	Qualcomm MSM Interface
SLQS	Sierra Linux QMI SDK
WP	Work Package

3. Related Documentation

Table 3. Related Documentation

Ref. #	Doc. #	Document title
[R-1]	4110914	Linux QMI SDK Application Developer's Guide
[R-2]		Linux QMI SDK Sanity Test Report – 04.00.11
[R-3]		Linux QMI SDK Software Validation Test Report – 04.00.11

4.

Compatibility

Table 4. Hardware Compatibility

Devices Compatibility List
AR7554/AR7554RD
EM/MC73xx
MC77xx
MC83x5
MC/SL9090
MC/EM74xx
WP8548/7502/7504
WP7601/WP7603

Note: MC77xx devices must operate in "QMI Mode" and not in "Direct-IP" mode.

To switch device into QMI mode of operation, use the following AT commands:

- **AT!UDPID=68A2**
- **AT!RESET**

Note: MC73xx, set the device using "AT!UDPID=68C0".

The tables below list the hexadecimal values of the Vendor ID (VID) and Product ID (PID) pairs supported by the Linux QMI SDK.

Table 5. Supported Application-Mode VID/PIDs

VID	1199	1199	1199	1199	1199	1199	1199	1199	3F0
PID	68A2	68C0	9011	9013	9015	9019	9041	9071	371D

Table 6. Supported Boot-Mode VID/PIDs

VID	1199	1199	1199	1199	1199	1199	1199	1199	3F0
PID	68A2	68C0	9010	9012	9014	9018	9040	9070	361D

To check your device's VID/PID, issue the `lsusb` command. The output will present a list of USB devices with a column showing each device's manufacturer. The device VID/PID can be read from the row containing the correct device manufacturer. Additionally, on MC77xx devices, you can use the `AT!UDINFO?` command to check VID/PID information. If your VID/PID does not match any of the entries in the tables above, contact your FAE for support.

The following table enumerates the modems with their corresponding firmware that were tested with Linux QMI SDK 04.00.11.

Table 7. Modem and Firmware tested with the SDK

Modem	Firmware
MC7430	SWI9X30C_02.26.00.00
EM/MC7455	SWI9X30C_02.26.00.00
MC7304	SWI9X15C_05.05.58.00
MC7354	SWI9X15C_05.05.58.00
MC7350	SWI9C15C_05.05.58.01
MC7355	SWI9X15C_05.05.67.00
MC7330	SWI9X15C_05.05.65.00
MC7305	SWI9X15C_05.05.58.00
MC7710	SWI9200X_03.05.29.06
MC9090	SWI6600U_02.04.06.00
EM7355	SWI9X15C_05.05.67.00
EM7330	SWI9X15C_05.05.65.00
EM7305	SWI9X15C_05.05.67.00
WP7502	SWI9X15Y_07.12.09.00
WP7504	SWI9X15Y_07.12.09.00
WP8548	SWI9X15Y_07.12.09.00
WP7603	SWI9X07Y_02.07.01.00
EM7565	SWI9X50C_00.05.03.00

Note: The SDK in general work across all firmware revisions. However, some new API might require a recent firmware.

5.

Software Release Description

Table 8. Release Information

Component	Content
SDK version	04.00.11
Date of generation	30/10/2017
Binary archive name	SLQS04.00.11.bin.tar.gz
Binary archive name	SLQS04.00.11-lite.bin.tar.gz
Source code archive name	SLQS04.00.11.tar.gz
Processor compatibility	x86, ARM, PowerPC, MIPS
Linux kernel compatibility	2.6.32 to 4.8
USB drivers compatibility	S2.30N2.48

6.

Software Changes Description

6.1. Validated Corrections/Improvements

ID	Description
LXQMISDK-1028	Support QMAP IPv6 in SDK
LXQMISDK-1022	unpack_wds_SLQSGetDataBearerTechnology API does not update the field "dataBearerMask"
LXQMISDK-1019	unpack_dms_GetDeviceCap didn't unpack Radiofaces correctly
LXQMISDK-1018	dump_GetNetworkTime didn't print result correctly
LXQMISDK-1017	unpack_dms_GetFirmwareRevisions didn't update output size
LXQMISDK-1006	Reset process in SDK can put the modem OFFLINE instead of resetting the modem
LXQMISDK-1002	QMI SDK to support wp76xx and EM7565 RAM dump
LXQMISDK-997	sms_SLQSWCDMADecodeMTTextMsg adds an extra 'F' to sender address
LXQMISDK-996	Limit QMI_DMS_SWI_GET_FSN response to 14 bytes
LXQMISDK-992	unpack_sms_SLQSGetSMS returns eQCWWAN_ERR_NULL_TLV if SMS read fails
LXQMISDK-991	SDKLITE APIs return eQCWWAN_ERR_NULL_TLV unnecessarily
LXQMISDK-990	unpack_wds_SLQSStartDataSession returns eQCWWAN_ERR_NULL_TLV if eTLV_PACKET_DATA_HANDLE is absent
LXQMISDK-989	SDKLITE does not decode incoming SMS sender address correctly
LXQMISDK-986	Pointers in SDK APIs are not being null checked properly
LXQMISDK-985	WDS Indication QMI_WDS_GET_PKT_STATUS_IND did not received in packing demo

ID	Description
LXQMISDK-983	SLQSAVMSGetSessionInfo causes application crash
LXQMISDK-982	packingdemo missing SWI LOC pack and unpack loop test.
LXQMISDK-981	lite-qmi-demo update to read ICCID/IMSI for WP760x
LXQMISDK-980	packingdemo dump_SLQSNasGetTxRxInfo NULL check incorrect parameter
LXQMISDK-979	[9x30] Support fw download for MBIM enabled module with lite api
LXQMISDK-978	QoS QMI notifications not being sent
LXQMISDK-977	unpack_wds_SLQSGetRuntimeSettings is returning 62446 (eQCWWAN_ERR_NULL_TLV)
LXQMISDK-976	Tx and Rx counters are not available with IP aliased interface with QMAP
LXQMISDK-975	SDK unable to find EM7565
LXQMISDK-955	Unable to receive incoming SMS notification
LXQMISDK-946	fw-download does not set image preference to send FW to slots with WP76
LXQMISDK-937	Linux SDK support for WP77xx
LXQMISDK-914	Add eDRX QMI commands
LXQMISDK-889	dump_ functions are not complete in lite-qmi-demo

6.2. Known Issues

ID	Description
QTI9X07-940	Add QMI to change USB composition
LXQMISDK-1032	Failed to start both IPV4 and IPV6 using same profile in QMAP mode
LXQMISDK-998	EM7565 firmware update support

6.3. Minor API prototype change

Note: when updating SDK, please make sure to pull the latest headers from <SDK_ROOT>/api folder

6.4. Macro Usage

Macro	Usage
AM_API_MUTEX_TIMEOUT_IN_SEC	This is the timeout time (in seconds) for which the mutex is locked when the SDK is compiled with API_TIMEOUT flag.
API_TIMEOUT	This is a compilation flag. If this flag is defined during compilation, SDK will lock the mutex for a particular time. The locking time is defined by AM_API_MUTEX_TIMEOUT_IN_SEC. If this flag is not defined then the mutex is locked indefinitely.